

## VS 型片式铝电解电容

## VS Series Chip Type Aluminum Electrolytic Capacitors

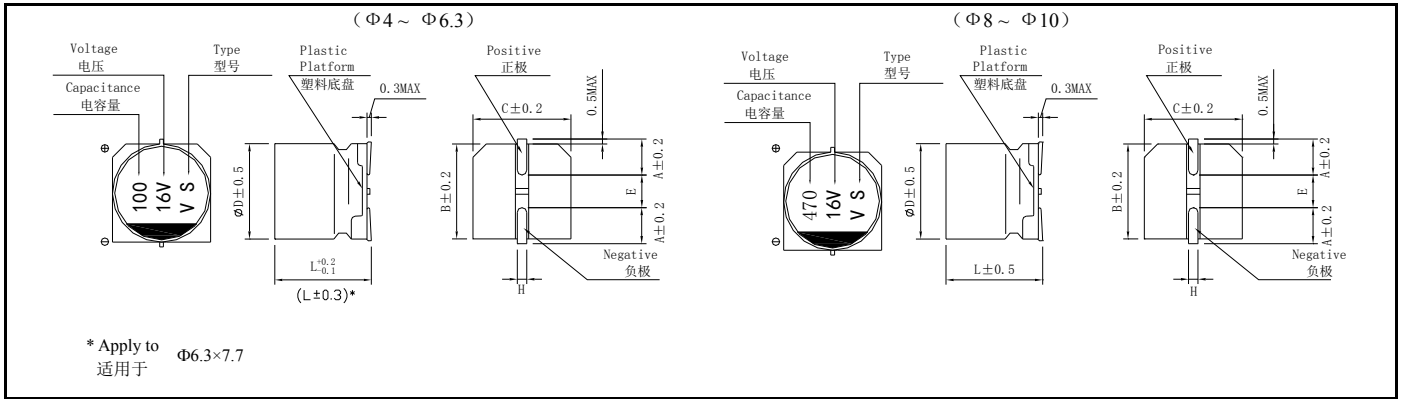
## 特点 Features

- 产品直径 Case diameter:  $\Phi$  4mm –  $\Phi$  10mm.
- 适用于再流焊。 Reflow soldering is available.
- 适用于高密度表面组装。 Available for high density surface mounting.
- ROHS 指令已对应完毕。 Adapted to the ROHS directive.

## 主要技术性能 Specifications

项目 Items	特性 Characteristics									
工作温度范围 Operating Temperature Range	-40℃ ~ 85℃									
额定电压范围 Rated Voltage Range	6.3V ~ 100V									
标称容量范围 Nominal Capacitance Range	0.1 ~ 1500 $\mu$ F									
标称容量允许偏差 Nominal Capacitance Tolerance	$\pm 20\%$ (20℃, 120Hz)									
漏电流 Leakage Current	$I \leq 0.01C_R V_R$ or 3( $\mu$ A), 取较大者 (2 分钟) $C_R$ : 标称容量 ( $\mu$ F) $U_R$ : 额定电压 (V) $I \leq 0.01C_R V_R$ or 3( $\mu$ A) Whichever is greater(at 20℃, After 2 minutes) $C_R$ : Nominal Capacitance ( $\mu$ F) $U_R$ : Rated voltages (V)									
损耗角正切 (tg $\delta$ ) Dissipation Factor (Max) 20℃, 120Hz	$U_R$ (V)	6.3	10	16	25	35	50	63	100	
	tg $\delta$	0.28	0.24	0.20	0.16	0.14	0.12	0.12	0.10	
耐久性 Load Life	+85℃施加额定电压 2000 小时后, 电容器应满足以下要求: After 2000 hours' application of rated voltage at 85℃, the capacitor shall meet the following requirement:									
	容量变化率 Capacitance Change	$\pm 20\%$ 初始值以内 Within $\pm 20\%$ of the initial value								
	损耗角正切 Dissipation Factor	$\leq 200\%$ 初始规定值 Not more than 200% of the initial specified value								
	漏电流 Leakage Current	$\leq$ 初始规定值 Not more than the initial specified value								
高温贮存 Shelf Life	+85℃贮存 1000 小时后, 电容器应满足以上耐久性要求 After storage for 1000 hours at +85℃, the capacitors shall meet the requirement of load life above									
低温特性 Low Temperature Stability 阻抗比 Impedance Ratio (120Hz)	$U_R$ (V)									
	$Z(-25^\circ\text{C})/Z(+20^\circ\text{C})$	$< \Phi 8$	4	3	2	2	2	2	2	2
		$\geq \Phi 8$	5	4	3	2	2	2	2	2
	$Z(-40^\circ\text{C})/Z(+20^\circ\text{C})$	$< \Phi 8$	8	8	4	4	3	3	3	3
$\geq \Phi 8$		10	8	6	4	3	3	3	3	
耐焊接热 Resistance to Soldering Heat	在 250℃的条件下, 电容器在热板上保持 30 秒, 然后从热板上取出电容器, 让其在室温下恢复, 电容器应满足以下要求: The capacitors shall be kept on the hot plate maintained at 250℃ for 30 seconds. After removing from the hot plate and restored at room temperature, they meet the following requirement.									
	容量变化率 Capacitance Change	$\pm 10\%$ 初始值以内 Within $\pm 10\%$ of the initial value								
	损耗角正切 Dissipation Factor	$\leq$ 初始规定值 Not more than the initial specified value								
	漏电流 Leakage Current	$\leq$ 初始规定值 Not more than the initial specified value								

尺寸图 Dimensions



	(mm)							
	4 × 5.4	5 × 5.4	6.3 × 5.4	6.3 × 7.7	8 × 6.5	8 × 10.5	10 × 10.5	
A	1.8	2.1	2.4	2.4	2.9	2.9	3.2	
B	4.3	5.3	6.6	6.6	8.3	8.3	10.3	
C	4.3	5.3	6.6	6.6	8.3	8.3	10.3	
E	1.0	1.3	2.2	2.2	2.3	3.1	4.5	
L	5.4	5.4	5.4	7.7	6.5	10.5	10.5	
H	0.5 ~ 0.8					0.8 ~ 1.1		

■ 标称电容量、额定电压、额定纹波电流与外形尺寸对应表

Nominal capacitance, rated voltage, rated ripple current and case size table

μF	6.3		10		16		25		35		50		63		100	
	D×L mm	I~ mA	D×L mm	I~ mA	D×L mm	I~ mA	D×L mm	I~ mA	D×L mm	I~ mA	D×L mm	I~ mA	D×L mm	I~ mA	D×L mm	I~ mA
0.1											4×5.4	3.2				
0.22											4×5.4	4.7				
0.33											4×5.4	5.7				
0.47											4×5.4	6.8				
1.0											4×5.4	10				
2.2											4×5.4	15				
3.3											4×5.4	18				
4.7							4×5.4	22	4×5.4	20	4×5.4	24			6.3×7.7	40
											5×5.4	25				
10					4×5.4	26	4×5.4	24	4×5.4	24	5×5.4	41	6.3×7.7	50	8×10.5	77
							5×5.4	32	5×5.4	34	6.3×5.4	43				
22	4×5.4	31	4×5.4	30	4×5.4	30	5×5.4	38	5×5.4	39	6.3×5.4	71	6.3×7.7	96	8×10.5	100
			5×5.4	39	5×5.4	44	6.3×5.4	55	6.3×5.4	59						
33	4×5.4	31	4×5.4	34	5×5.4	44	5×5.4	46	6.3×5.4	65	6.3×7.7	94	8×10.5	117	10×10.5	130
	5×5.4	44	5×5.4	48	6.3×5.4	63	6.3×5.4	67								
47	4×5.4	40	5×5.4	47	5×5.4	52	6.3×5.4	70	6.3×7.7	94	6.3×7.7	105	10×10.5	140		
	5×5.4	52	6.3×5.4	67	6.3×5.4	75					8×10.5	140				
100	5×5.4	47	5×5.4	54	6.3×5.4	103	6.3×7.7	143	6.3×7.7	132	8×10.5	200				
	6.3×5.4	89	6.3×5.4	98			8×10.5	175	10×10.5	250						
220	6.3×5.4	91	6.3×7.7	173	6.3×7.7	162	8×10.5	230	8×10.5	200	10×10.5	320				
			8×6.5	250	8×10.5	280	10×10.5	310	10×10.5	310						
330	6.3×7.7	188	8×10.5	390	8×10.5	320	8×10.5	270	10×10.5	360						
							10×10.5	340								
470	8×10.5	380	8×10.5	390	8×10.5	350	10×10.5	380								
					10×10.5	420										
1000	8×10.5	370	10×10.5	580												
	10×10.5	700														
1500	10×10.5	750														

L I~ = Rated ripple current (mA) (85°C, 120Hz) I~ = 额定纹波电流 (mA) (85°C, 120Hz)